

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A supporting structure cassette device for supporting mother substrates having a length, a width and a thickness, ~~the mother substrates including a plurality of a liquid crystal display device and having a plurality of patterned spacers between the mother substrates~~, comprising:

a frame having a length, a width and a height, the length being substantially greater than the width, wherein the length and width of the frame corresponds to the length of width of inserted mother substrate, respectively;

a first plurality of support members protruding from a first side of the frame and a second plurality of support members protruding from a second opposing side of the frame; and

first rectangular supporting bars connected to the first plurality of support members and second rectangular supporting bars connected to the second plurality of support members, wherein the supporting bars are disposed at a distance of about 170mm from the frame,

wherein the first and second supporting bars contact and support a lower surface of inserted mother substrates along first and second parallel sides of the inserted mother substrates at opposing parallel regions of the lower surface, wherein the first supporting bars are slightly spaced from each other and the second supporting bars are slightly spaced from each other, so that the first and second supporting bars are in contacted with substantially the whole width of the first and second parallel sides of the inserted mother substrates to uniformly distribute a load to the patterned spacers in substantially the whole width of the first and second parallel sides of the inserted mother substrates,

wherein the mother substrates include a first mother substrate having a plurality of panel regions having a plurality of thin film transistors, a second mother substrate having a plurality of panel regions having a color filter, and a liquid crystal layer between the first mother substrate and second mother substrate,

wherein the liquid crystal layer is formed by dropping liquid crystal material onto a plurality of panel regions of at least one mother substrate of the first mother substrate and the second mother substrate and attaching the first mother substrate and the second mother substrate each other.

2. (Currently Amended) The structure device according to claim 1, wherein the supporting bars include acetal resin material.

3. (Currently Amended) The structure device according to claim 1, wherein the supporting bars contact the substrate via surface contact.

4-6. (Cancelled)

7. (Currently Amended) The device according to claim 1 [[4]], wherein the first and second pluralities of support members include a first set of support members disposed to extend along a first plane within the frame and a second set of support members disposed to extend along a second plane different from the first plane within the frame.

8. (Currently Amended) The device structure according to claim 7, wherein each of the first and second sets of support members includes a first pair of support members extending from one of the opposing sides of the frame and a second pair of support members extending from another one of the opposing sides of the frame.

9. (Currently Amended) The device structure according to claim 1 3, wherein the substrates are transferred onto the supporting bars by a robot arm.

10. (Currently Amended) The device structure according to claim 8, wherein the supporting bars extend along the first parallel sides of the substrates.

11. (Original) The device structure according to claim 10, wherein the supporting bars extend past edge portions of the substrates along the first parallel sides of the substrates.

12. (Original) The device structure according to claim 8, wherein a total number of supporting bars is dependent upon a size of the frame.

13. (Original) The device structure according to claim 12, wherein the supporting bars prevent deformation of the liquid crystal display panels.

14-25. (Cancelled)

26. (Withdrawn) A method of supporting mother substrates, comprising:

providing a frame having a length, a width and a height, the length being substantially greater than the width;

providing a first plurality of support members protruding from a first side of the frame and a second plurality of support members protruding from a second opposing side of the frame;

providing first rectangular supporting bars connected to the first plurality of support members and second rectangular supporting bars connected to the second plurality of support members, wherein the supporting bars are disposed at a distance of about 170mm from the frame; and

inserting mother substrate into the frame, the mother substrates including a plurality of panel regions of a liquid crystal display device having a plurality of patterned spacers between the mother substrates, the mother substrates having a length, a width and a thickness, wherein the mother substrates are inserted such that the length and width of the frame corresponds to the length of width of the inserted mother substrates,

wherein the first and second supporting bars contact a lower surface of the inserted mother substrates along first and second parallel sides of the inserted mother substrates at opposing parallel regions of the lower surface, wherein the first supporting bars are slightly spaced from each other and the second supporting bars are slightly spaced from each other, so that the first and second supporting bars are in contacted with substantially the whole width of the first and second parallel sides of the inserted mother substrates to uniformly distribute a load to the patterned spacers in substantially the whole width of the first and second parallel sides of the inserted mother substrates.